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D. Until prospective payment for capital costs is implemented, the provisions of 12 VAC 30-70-70 regarding recapture of depreciation shall remain in effect.

#### 12 VAC 30-70-280. Payment for direct medical education costs.

- A. Until the Department notifies hospitals otherwise, direct medical education shall continue to be paid on an allowable cost basis. Payments for direct medical education costs shall be made in estimated quarterly lump sum amounts and settled at the hospital's fiscal year end.
- B. Final payment for direct medical education costs shall be equal to the hospital's Medicaid utilization percentage times the hospital's total direct medical education costs. As defined in subsection C of 12 VAC 30-70-220, the Medicaid utilization percentage includes days associated with inpatient hospital services provided to Medicaid patients but reimbursed by capitated managed care providers.
- C. Direct medical education shall not be a reimbursable cost in freestanding psychiatric facilities licensed as hospitals.

### 12 VAC 30-70-290. Payment for indirect medical education costs.

- A. Hospitals shall be eligible to receive payments for indirect medical education. These payments recognize the increased use of ancillary services associated with the educational process and the higher case-mix intensity of teaching hospitals. The payments for indirect medical education shall be made in estimated quarterly lump sum amounts and settled at the hospital's fiscal year end.
- B. Final payment for IME shall be determined as follows:
  - 1. Type One hospitals shall receive an IME payment equal to the hospital's Medicaid operating reimbursement times an IME percentage determined as follows:

IME Percentage for Type One Hospitals = 
$$[1.89 \times ((1 + r)^{0.405} - 1)]$$

2. Type Two hospitals shall receive an IME payment equal to the hospital's Medicaid operating reimbursement times an IME percentage determined as follows:

IME Percentage for Type Two Hospitals = 
$$[1.89 \times ((1 + r)^{0.405} - 1)] \times 0.4043$$

In both equations, r is the ratio of full-time equivalent residents to staffed beds, excluding nursery beds. The IME payment shall be calculated each year using the most recent reliable

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data regarding the number of full-time equivalent residents and the number of staffed beds, excluding nursery beds. Thus, for State Fiscal Year 1999, data for State Fiscal Year 1995 shall be used.

C. An additional IME payment shall be made for inpatient hospital services provided to Medicaid patients but reimbursed by capitated managed care providers. Until complete and reliable encounter data are available from capitated managed care providers, which would permit the development of a case-mix index for these patients, this payment shall be equal to the hospital's hospital specific operating rate per case, as determined in 12 VAC 30-70-310, times the hospital's HMO discharges times the hospital's IME percentage, as determined in subsection B of this section.

### 12 VAC 30-70-300. Payment to disproportionate share hospitals.

- A. Payments to disproportionate share hospitals (DSH) shall be prospectively determined in advance of the state fiscal year to which they apply. The payments shall be made on a quarterly basis, shall be final, and shall not be subject to settlement except when necessary due to the limit in subsection E of this section.
- B. Hospitals qualifying under the 15 percent inpatient Medicaid utilization rate shall receive a DSH payment based on the hospital's type and the hospital's Medicaid utilization percentage.
  - 1. Type One hospitals shall-receive a DSH payment equal to the sum of (i) the hospital's Medicaid utilization percentage in excess of 15 percent, times 11, times the hospital's Medicaid operating reimbursement, times 1.4433 and (ii) the hospital's Medicaid utilization percentage in excess of 30 percent, times 11, times the hospital's Medicaid operating reimbursement, times 1.4433.
  - 2. Type Two hospitals shall receive a DSH payment equal to the sum of (i) the hospital's Medicaid utilization percentage in excess of 15 percent, times the hospital's Medicaid operating reimbursement, times 1.2074 and (ii) the hospital's Medicaid utilization percentage in excess of 30 percent, times the hospital's Medicaid operating reimbursement, times 1.2074.
- C. Hospitals qualifying under the 25 percent low-income patient utilization rate shall receive a DSH payment based on the hospital's type and the hospital's low-income utilization rate.
  - 1. Type One hospitals shall receive a DSH payment equal to the product of the hospital's low-income utilization in excess of 25 percent, times 11, times the hospital's Medicaid operating reimbursement.

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- Type Two hospitals shall receive a DSH payment equal to the product of the hospital's low-income utilization in excess of 25 percent, times the hospital's Medicaid operating reimbursement.
- D. No DSH payments shall exceed any applicable limitations upon such payments established by federal law or regulations and OBRA 1993 §13621. A payment adjustment during a fiscal year shall not exceed the sum of:
  - Medicaid allowable costs incurred during the year less Medicaid payments, net of
    disproportionate share payment adjustments, for services provided during the year.
    Costs and payments for Medicaid recipients enrolled in capitated managed care
    programs shall be considered Medicaid costs and payments for the purposes of this
    section.
  - Costs incurred in serving persons who have no insurance less payments received from those patients or from a third party on behalf of those patients. Payments made by any unit of the Commonwealth or local government to a hospital for services provided to indigent patients shall not be considered to be a source of third party payment.
- E. Each hospital's eligibility for DSH payment and the amount of the DSH payment shall be calculated each year using the most recent reliable utilization data and projected operating reimbursement data available. The utilization data used to determine eligibility for DSH payment and the amount of the DSH payment shall include days for Medicaid recipients enrolled in capitated managed care programs. For State Fiscal Year 1999, utilization data for State Fiscal Year 1995 shall be used.
  - Each hospital with a Medicaid-recognized Neonatal Intensive Care Unit (NICU), a
    unit having had a unique NICU operating cost limit under subdivision 6 of 12 VAC
    30-70-60, shall have its DSH payment calculated separately for the NICU and for the
    remainder of the hospital as if the two were separate and distinct providers.
  - 2. For freestanding psychiatric facilities licensed as hospitals, DSH payment shall be based on the most recent filed Medicare cost report available before the beginning of the state fiscal year for which a payment is being calculated.

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12 VAC 30-70-310. Hospital specific operating rate per case.

The hospital specific operating rate per case shall be equal to the labor portion of the statewide operating rate per case, as determined in 12 VAC 30-70-330, times the hospital's Medicare wage index plus the non-labor portion of the statewide operating rate per case.

12 VAC 30-70-320. Hospital specific operating rate per day.

- A. The hospital specific operating rate per day shall be equal to the labor portion of the statewide operating rate per day, as determined in subsection A of 12 VAC 30-70-340, times the hospital's Medicare wage index plus the non-labor portion of the statewide operating rate per day.
- B. The hospital specific rate per day for freestanding psychiatric cases shall be equal to the hospital specific operating rate per day, as determined in subsection A of this section, plus the hospital specific capital rate per day. The hospital specific capital rate per day shall be equal to the statewide capital rate per day, as determined in subsection B of 12 VAC 30-70-340, times the hospital's Medicare geographic adjustment factor.

#### 12 VAC 30-70-330. Statewide operating rate per case.

- A. The statewide operating rate per case shall be equal to the base year standardized operating costs per case, as determined in 12 VAC 30-70-360, times the inflation values specified in 12 VAC 30-70-350 times the adjustment factor specified in subsection B of this section.
- B. The adjustment factor shall be determined separately for Type One and Type Two hospitals and shall be the ratio of the following two numbers:
  - 1. The numerator of the factor is the aggregate total Medicaid operating payments to affected hospitals in hospital fiscal years ending in the calendar year ending six months prior to the start of the state fiscal year used as the base year. That is, for State Fiscal Year 1999, the base year shall be State Fiscal Year 1997, and the calendar year that ends six months prior to the start of State Fiscal Year 1997 is Calendar Yéar 1995.
  - 2. The denominator of the factor is the aggregate total Medicaid allowable operating cost as determined from settled cost reports from the same hospitals in the same year.

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### 12 VAC 30-70-340. Statewide operating rate per day.

- A. The statewide operating rate per day shall be equal to the base year standardized operating costs per day, as determined in subsection B of 12 VAC 30-70-370, times the inflation values specified in 12 VAC 30-70-350 times the adjustment factor specified in subsection C of this section.
- B. The statewide capital rate per day shall be equal to the base year standardized capital costs per day, as determined in subsection D of 12 VAC 30-70-370, times the inflation values specified in 12 VAC 30-70-350 times the adjustment factor specified in subsection C of this section.
- C. The adjustment factor for acute care psychiatric cases and rehabilitation cases shall be the one specified in subsection B of 12 VAC 30-70-330. For freestanding psychiatric cases, this factor shall be further adjusted to reflect the fact that the hospital specific rate per day for such cases, as determined in subsection B of 12 VAC 30-70-320, represents an all-inclusive payment for operating and capital costs and that capital costs are being passed-through.

### 12 VAC 30-70-350. Updating rates for inflation.

Each July, the DRI-Virginia moving average values as compiled and published by DRI/McGraw-Hill under contract with the Department shall be used to update the base year standardized operating costs per case, as determined in 12 VAC 30-70-360, and the base year standardized operating costs per day, as determined in 12 VAC 30-70-370, to the midpoint of the upcoming state fiscal year. The most current table available prior to the effective date of the new rates shall be used to inflate base year amounts to the upcoming rate year. Thus, corrections made by DRI/McGraw-Hill in the moving averages that were used to update rates for previous state fiscal years shall be automatically incorporated into the moving averages that are being used to update rates for the upcoming state fiscal year.

#### 12 VAC 30-70-360. Base year standardized operating costs per case.

A. For the purposes of calculating the base year standardized operating costs per case, base year claims data for all DRG cases, including outlier cases, shall be used. Base year claims data for per diem cases shall not be used. Separate base year standardized operating costs per case shall be calculated for Type One and Type Two hospitals. In calculating the base year standardized operating costs per case, a transfer case shall be counted as a fraction of a case based on the ratio of its length of stay to the arithmetic mean length of stay for cases assigned to the same DRG as the transfer case.

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- B. Using the data elements identified in subsection E of 12 VAC 30-70-220, the following methodology shall be used to calculate the base year standardized operating costs per case:
  - 1. The operating costs for each DRG case shall be calculated by multiplying the hospital's total charges for the case by the hospital's operating cost-to-charge ratio, as defined in subsection C of 12 VAC 30-70-220.
  - 2. The standardized operating costs for each DRG case shall be calculated as follows:
    - a. The operating costs shall be multiplied by the statewide average labor portion of operating costs, yielding the labor portion of operating costs. Hence, the non-labor portion of operating costs shall constitute one minus the statewide average labor portion of operating costs times the operating costs.
    - b. The labor portion of operating costs shall be divided by the hospital's Medicare wage index, yielding the standardized labor portion of operating costs.
    - c. The standardized labor portion of operating costs shall be added to the non-labor portion of operating costs, yielding standardized operating costs.
  - 3. The case-mix neutral standardized operating costs for each DRG case shall be calculated by dividing the standardized operating costs for the case by the hospital's case-mix index.
  - 4. The base year standardized operating costs per case shall be calculated by summing the case-mix neutral standardized operating costs for all DRG cases and dividing by the total number of DRG cases.
  - 5. The base year standardized operating costs per case shall be reduced by 5.1 percent to create a pool for outlier operating payments. Eligibility for outlier operating payments and the amount of the outlier operating payments shall be determined in accordance with 12 VAC 30-70-260.
- C. Because the current cost report format does not separately identify psychiatric costs, claims data shall be used to calculate the base year standardized operating costs per case, as well as the base year standardized operating costs per day described in 12 VAC 30-70-320. At such time as the cost report permits the separate identification of psychiatric costs and the DRG payment system is recalibrated and rebased, cost report data shall be used to calculate the

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base year standardized operating costs per case and base year standardized operating costs per day.

12 VAC 30-70-370. Base year standardized operating costs per day.

- A. For the purpose of calculating the base year standardized operating costs per day, base year claims data for per diem cases shall be used. Base year claims data for DRG cases shall not be used. Separate base year standardized operating costs per day shall be calculated for Type One and Type Two hospitals.
- B. Using the data elements identified in subsection E of 12 VAC 30-70-220, the following methodology shall be used to calculate the base year standardized operating costs per day:
  - 1. The operating costs for each per diem case shall be calculated by multiplying the hospital's total charges for the case by the hospital's operating cost-to-charge ratio, as defined in subsection C of 12 VAC 30-70-220.
  - 2. The standardized operating costs for each per diem case shall be calculated as follows:
    - a. The operating costs shall be multiplied by the statewide average labor portion of operating costs, yielding the labor portion of operating costs. Hence, the non-labor portion of operating costs shall constitute one minus the statewide average labor portion of operating costs times the operating costs.
    - b. The labor portion of operating costs shall be divided by the hospital's Medicare wage index, yielding the standardized labor portion of operating costs.
    - c. The standardized labor portion of operating costs shall be added to the non-labor portion of operating costs, yielding standardized operating costs.
  - 3. The base year standardized operating costs per day for acute care psychiatric cases shall be calculated by summing the standardized operating costs for acute care psychiatric cases and dividing by the total number of acute care psychiatric days. This calculation shall be repeated separately for freestanding psychiatric cases and rehabilitation cases.
- C. For general acute care hospitals with psychiatric DPUs, the psychiatric operating cost-tocharge ratio shall be used in the above calculations.

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- D. The following methodology shall be used to calculate the base year standardized capital costs per day for freestanding psychiatric cases:
  - The capital costs for each freestanding psychiatric case shall be calculated by multiplying the hospital's total charges for the case by the hospital's capital cost-tocharge ratio.
  - 2. The capital costs for each freestanding psychiatric case shall be divided by the hospital's Medicare geographic adjustment factor, yielding standardized capital costs.
  - 3. The base year standardized capital costs per day for freestanding psychiatric cases shall be calculated by summing the standardized capital costs for freestanding psychiatric cases and dividing by the total number of freestanding psychiatric days.

12 VAC 30-70-380. DRG relative weights and hospital case-mix indices.

- A. For the purposes of calculating DRG relative weights and hospital case-mix indices, base year claims data for all groupable cases shall be used. Base year claims data for ungroupable cases and per diem cases shall not be used. In calculating the DRG relative weights, a transfer case shall be counted as a fraction of a case based on the ratio of its length of stay to the arithmetic mean length of stay for cases assigned to the same DRG as the transfer case.
- B. Using the data elements identified in subsection E of 12 VAC 30-70-220, the following methodology shall be used to calculate the DRG relative weights:
  - 1. The operating costs for each groupable case shall be calculated by multiplying the hospital's total charges for the case by the hospital's operating cost-to-charge ratio, as defined in subsection C of 12 VAC 30-70-220. Similarly, the capital costs for each groupable case shall be calculated by multiplying the hospital's total charges for the case by the hospital's capital cost-to-charge ratio, as defined in subsection C of 12 VAC 30-70-220.
  - 2. The standardized operating costs for each groupable case shall be calculated as follows:
    - a. The operating costs shall be multiplied by the statewide average labor portion of operating costs, yielding the labor portion of operating costs. Hence, the non-labor portion of operating costs shall constitute one minus the statewide average labor portion of operating costs times the operating costs.

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- b. The labor portion of operating costs shall be divided by the hospital's Medicare wage index, yielding the standardized labor portion of operating costs.
- c. The standardized labor portion of operating costs shall be added to the non-labor portion of operating costs, yielding the standardized operating costs.
- 3. The standardized capital costs for each groupable case shall be calculated by dividing the capital costs for the case by the hospital's Medicare geographic adjustment factor.
- 4. The average standardized cost per DRG shall be calculated by summing the standardized operating costs and the standardized capital costs for all groupable cases in the DRG and dividing that amount by the number of groupable cases classified in the DRG.
- 5. The average standardized cost per case shall be calculated by summing the standardized operating costs and standardized capital costs for all groupable cases and dividing that amount by the total number of groupable cases.
- 6. The average standardized cost per DRG shall be divided by the average standardized cost per case to determine the DRG relative weight.
- C. Statistical outliers shall be eliminated from the calculation of the DRG relative weights. Within each DRG, cases shall be eliminated if (i) their standardized costs per case are outside of 3.0 standard deviations of the mean of the log distribution of the standardized costs per case and (ii) their standardized costs per day are outside of 3.0 standard deviations of the mean of the log distribution of the standardized costs per day. To eliminate a case, both conditions must be satisfied.
- D. In calculating the DRG relative weights, a threshold of five cases shall be set as the minimum number of cases required to calculate a reasonable DRG relative weight. In those instances where there are five or fewer cases, the Department's Medicaid claims data shall be supplemented with Medicaid claims data from another state. The DRG relative weights calculated according to this methodology will result in an average case weight that is different from the average case weight before the supplemental claims data was added. Therefore, the DRG relative weights shall be normalized by an adjustment factor so that the average case weight after the supplemental claims data were added is equal to the average case weight before the supplemental claims data were added.
- E. The DRG relative weights shall be used to calculate a case-mix index for each hospital. The case-mix index for a hospital is calculated by summing, across all DRGs, the product of the

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number of groupable cases in each DRG and the relative weight for each DRG and dividing this amount by the total number of groupable cases occurring at the hospital.

### 12 VAC 30-70-390. Recalibration and Rebasing Policy.

A. The Department recognizes that claims experience or modifications in federal policies may require adjustment to the DRG payment system policies provided in this part. The state agency shall recalibrate (evaluate and adjust the DRG relative weights and hospital case-mix indices) and rebase (review and update the base year standardized operating costs per case and the base year standardized operating costs per day) the DRG payment system at least every other year. Recalibration and rebasing shall be done in consultation with the Medicaid Hospital Payment Policy Advisory Council noted in 12 VAC 30-70-490. When rebasing is carried out, if new rates are not calculated before their required effective date, hospitals required to file cost reports and freestanding psychiatric facilities licensed as hospitals shall be settled at the new rates, for discharges on and after the effective date of those rates, at the time the hospitals' cost reports for the year in which the rates become effective are settled.

# Article 3. Other Provisions for Payment of Inpatient Hospital Services.

#### 12 VAC 30-70-400. Determination of per diem rates.

Each hospital's revised per diem rate or rates-to be used during the transition period (SFY 1997 and SFY 1998) shall be based on the hospital's previous peer group ceiling or ceilings that were established under the provisions of 12 VAC 30-70-10 through 12 VAC 30-70-130, with the following adjustments:

- 1. All operating ceilings will be increased by the same proportion to effect an aggregate increase in reimbursement of \$40 million in SFY1997. This adjustment incorporates in per diem rates the systemwide aggregate value of payment that otherwise would be made through the payment adjustment fund. This adjustment will be calculated using estimated 1997 rates and 1994 days.
- 2. Starting July 1, 1996, operating ceilings will be increased for inflation to the midpoint of the state fiscal year, not the hospital fiscal year. Inflation shall be based on the DRI-Virginia moving average value as compiled and published by DRI/McGraw-Hill under contract with DMAS, increased by two percentage points per year. The most current table available prior to the effective date of the new rates shall be used.

For services to be paid at SFY1998 rates, per diem rates shall be adjusted consistent with the methodology for updating rates under the DRG methodology (12 VAC 30-70-370).

3. There will be no disproportionate share hospital (DSH) per diem.

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